

ALFRED M. WORDEN  
**HELLO  
EARTH**  
GREETINGS FROM  
ENDEAVOUR



Throughout history man has speculated about life on the moon, but not until now has he been able to travel to the moon and speculate about life on earth! What is it like to travel over a million miles in space, to view the entire earth as a small floating sphere in an immense universe?

Alfred M. Worden was the pilot of Endeavour, the command-module for the Apollo 15 mission in 1971. During the nearly 67 hours his fellow astronauts Scott and Irwin were on the moon, he was in complete solitude, floating in space. The overwhelming experience of being alone in the universe gave him a profound feeling of rejuvenation. That experience changed his life.

Full of insight, these remarkable poems reveal the feeling man behind the astronaut image. Worden writes of rebirth at 39, of religious experience, the bitterness of public hero-worship, the loss of love, the incomparable joy of voyaging in space, and now the immensity of his solitude and distance from homemade global arguments and politics seem trivial. Indeed, Worden's experience has changed his entire view of reality on earth, and he shares it beautifully in Hello Earth, Greetings from Endeavour.





The World needs a better  
Raincoat. My Very Best Wishes  
and Fondest Regards

Al Worden

Apollo 15





## TRAINING

Training is endless  
It takes all my days,  
Flying and trying  
To work through the maze.

Meetings and mockups  
Reports and phone calls,  
Instructors go wild  
And climb up the walls.

You never will make it  
The clock seems to say,  
What I did wrong last week  
I got right today.

Simulators humming  
Practice the burn,

Try staying cool  
When at last it's your turn.

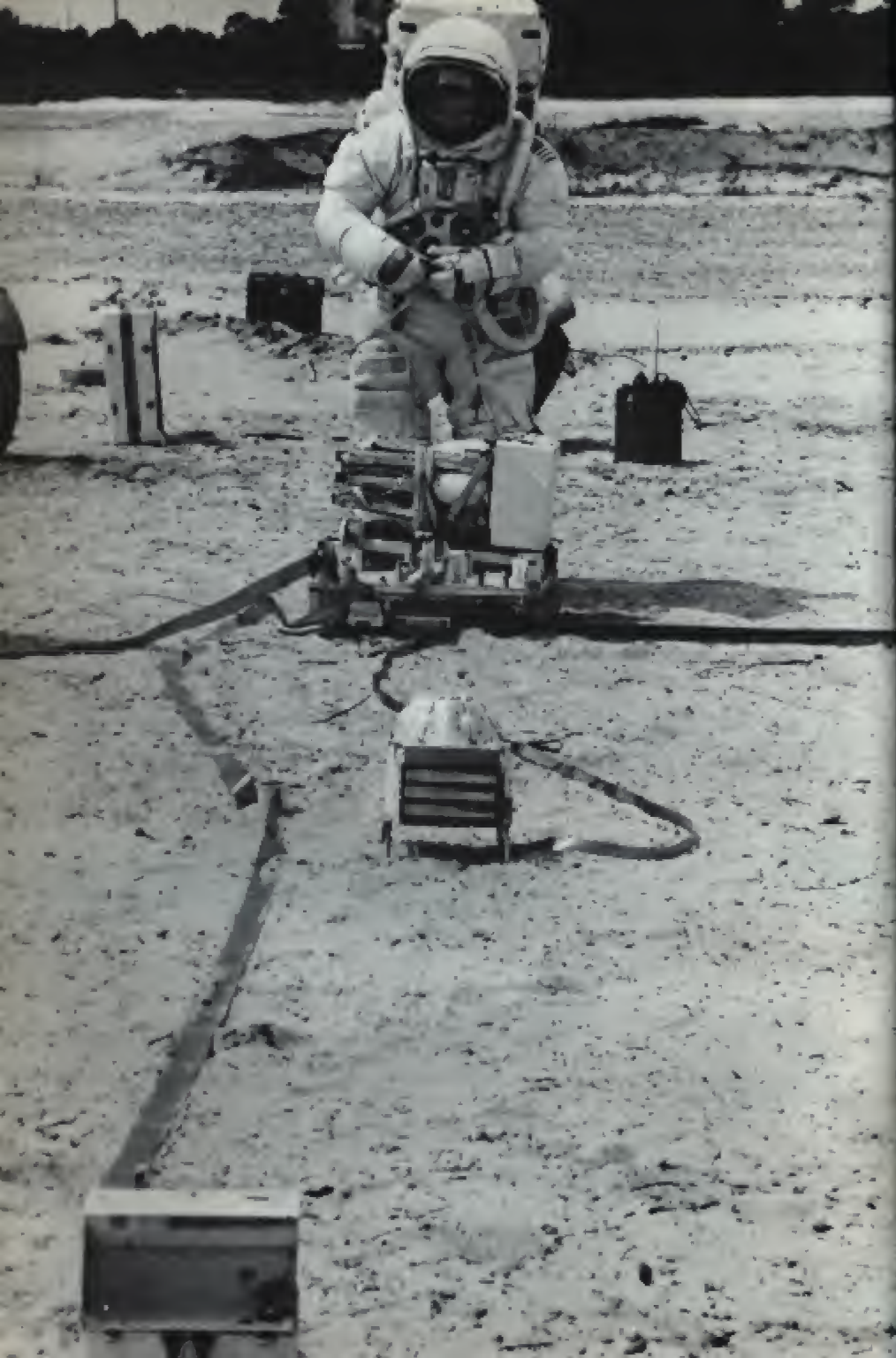
Pump down the chamber  
Let's see how he does,  
In the vacuum of Houston  
My head is a-buzz.

700 switches  
The joke is on me,  
I've studied the systems  
They're off 23.

Simulated malfunction,  
To us it looks real,



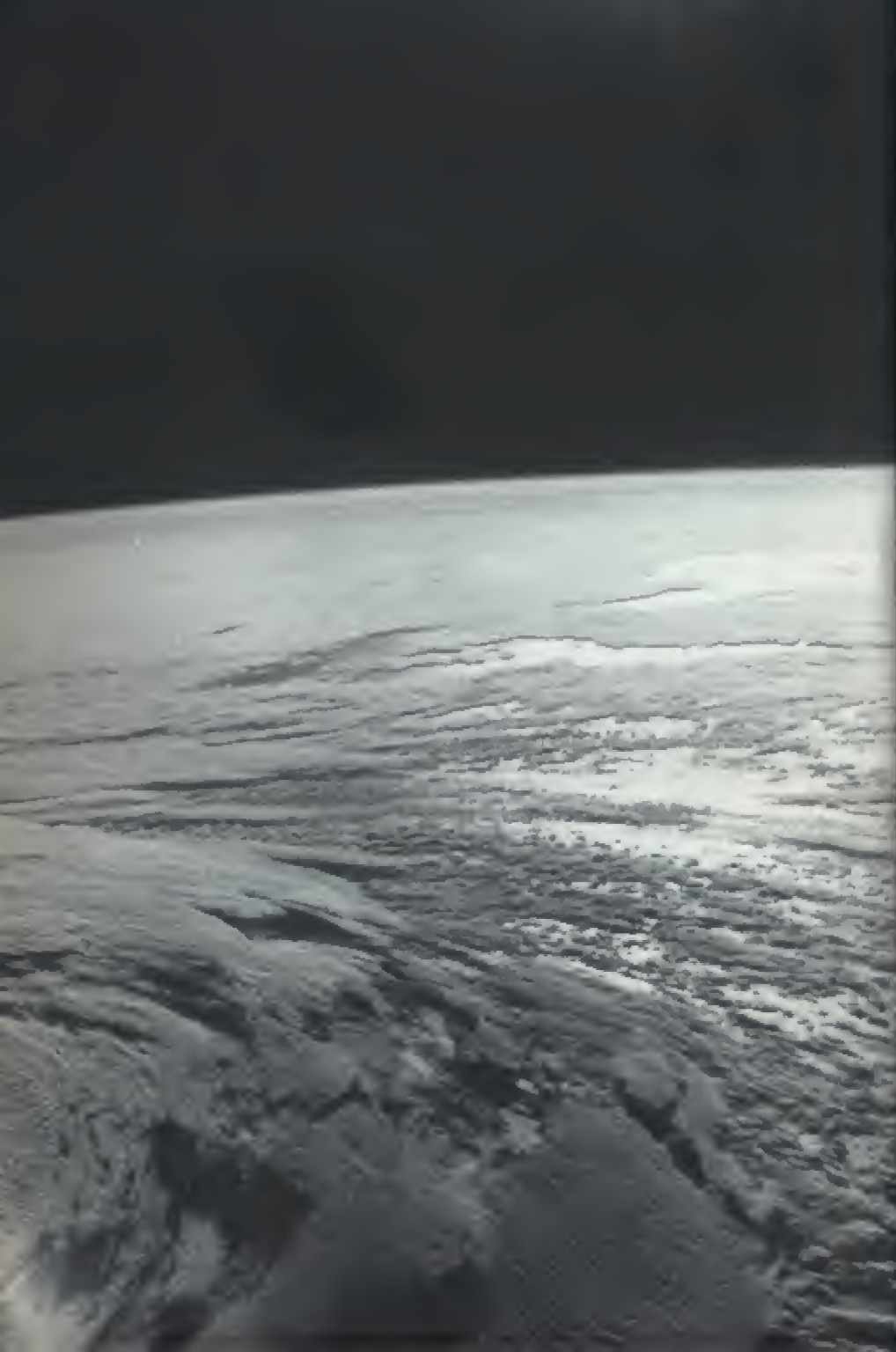




They're driving us crazy  
Inventing the wheel.  
Crashed on the moon?  
For the tenth time today,  
We must do it right  
For the program to pay.

Houston is calling,  
"You've lost Fuel Cell 3,  
Switch to the other  
And you'll be home free."

The training is endless  
It takes all your days,  
But then comes the flight  
And you find it all pays.



## OCEANS

In the distance, barely seen,  
The thin horizon knifes between  
The ocean and the sky.  
I know that I could reach it  
If I had wings to fly.

Then gazing upwards, far away,  
The stars and planets dance and play  
In an infinite ocean of space.  
Like Sirens of old they beckon me  
To join in their embrace.

Close at hand the pelicans pass  
As wind whispers softly through the grass  
And waves gently stride upon the beach.  
The world is calm and peaceful—  
No further than my reach.

How can I leave this lovely place  
To venture forth in outer space?  
Consider the dangers I might find







Exploring Ganymede  
Another question in my mind.

While I love the scene around  
My mind imagines, without bound,  
Why I feel the call to roam  
Could it be a Lunar flight  
Is one small step towards home?

## JULY LAUNCH

Blast off  
Fast off  
Sky clear  
Launch here;  
Speed up  
Straight up  
Lights flash  
Controls thrash;  
Vibrations  
Palpitations  
A fragile link  
Just here to think  
This wasn't intended  
Becoming extended  
Stop, stop.  
Stages drop





On we soar  
Engines roar  
Smoother ride  
Vacuum outside  
Horizon in view  
Launch phase is through.

## INTO ORBIT

It's nerves:  
The task is here now  
Stay cool, they won't know,  
And then it will be too late.  
I know I can do it.

A vibration, a roar,  
Motion,  
Shaking, rattling, we lift  
Straight up.

Lights flash, panel moves,  
Floating in nothingness  
Then softly,  
Softly, the motion begins again.

Push up the switch:  
Suddenly, light everywhere  
Slowly, softly, as in a dream



Streaking down  
Trying to return—too fast.

Flashes again, only more gentle,  
Relief—everything works—  
Is it possible?  
Man is a fragile thing.  
Didn't we realize that?

Faster, faster, but  
Only in numbers,  
There is no speed,  
No motion.  
Where are we?

This is a mistake:  
Am I the only one who cares?  
Upside-down  
Trying to fall  
Off  
the edge of the earth.

We've got to go on  
Compelled by God knows what



To find answers  
And rocks

And then—nothing;  
Lights stop, hearts start,  
In one monstrous moment  
    We are in orbit.

## PERSPECTIVE

Floating effortlessly, freely,  
Magnet-drawn to a target in the blackness  
We venture  
Moving easily in the confines of our small world,  
Sustaining life.

Stars in slow ballet pirouette;  
Passive thermal control  
We barbecue to the moon.

We believe we can illuminate our history  
By visiting this ancient lovely sphere.  
What value is this flight  
In a hostile ocean to an alien shore?  
What can the living learn from the dead?

Slowly the lunar disc slides by the window  
Familiar, but much larger,  
And then earth drifts into sight.  
Of all the stars, moons, and planets,





Of all I can see or imagine,  
This is the most beautiful;

All the colors of the universe  
Focused on one small globe;  
And it is our home, our refuge.

Now I know why I'm here:  
Not for a closer look at the moon,  
But to look back  
At our home  
The earth.

## 240,000 MILES FROM HOME

Sliding silvery wings  
Through day night light  
Barely turning  
Edging on to new worlds  
Tranquillity on the surface  
Anxiety within;  
Conquering the mountain of space  
Is not for the weak-hearted.  
Spinning earth in view  
Home-plate port  
Calls forth the question:  
Why climb this hill?  
Because it's there is not enough.  
Compelled by forces  
Inexorable, yet comprehensible  
Like the tick of a clock;  
Study the history in rocks  
And we learn more



About our own planet  
And all the others.  
One thing becomes clear  
When floating  
240,000 miles from home—  
God did it all.

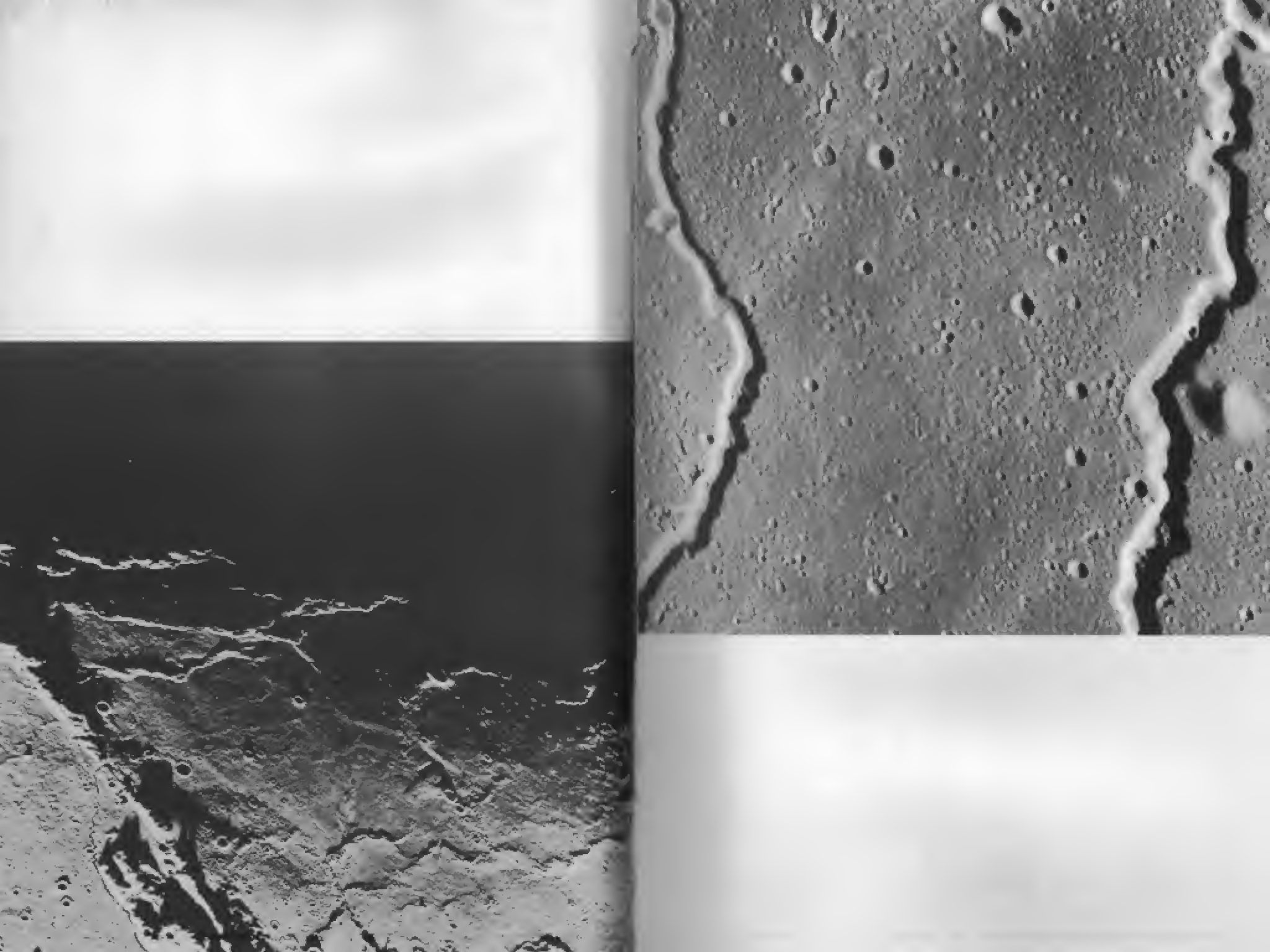




## MOONSCAPE

Here they come in fantastic procession  
Sliding in view, each one a lesson:  
Liebnitz, Ingenii, Bright One, and King,  
History's evidence, history's ring;  
Mare, mountain, rima and rille  
Violent once, now still;  
Crisium Littrow, Sulpicius Gallus,  
Hadley, Appenine, permanent talus;  
There's an order implied by the jigsaw of features  
Unlock the mystery, Earthling creatures.  
Earthbound no more, we travel afar  
To see for ourselves just where we are  
In the order of time the moon is our book  
Presenting us clearly a backward look.





## QUIETLY, LIKE A NIGHT BIRD

Quietly, like a night bird, floating, soaring, wingless  
We glide from shore to shore, curving and falling but not  
quite touching;  
Earth: a distant memory seen in an instant of repose,  
crescent-shaped, ethereal, beautiful,  
I wonder which part is home, but I know it doesn't matter  
... the bond is there in my mind and memory;  
Earth: a small, bubbly balloon hanging delicately in the  
nothingness of space  
Down there we argue of race and ideology and other trivia,  
I am a part of it, and yet apart from it;  
From here they seem all encapsulated in a prison where  
important philosophies go unnoticed while wars rage.  
Can man look outside his narrow window on life?  
From here it has never seemed clearer . . . we cannot  
escape that shrouded orb  
Pull together, push together, embrace your fellow man—  
there is no other way to survive . . .

Instantly and without warning the sun is switched off  
and I am in darkness,  
I look below to Aristarchus and Prinz.  
What earthly light makes them glow and approach  
out of the void?  
Luminescent they march towards me, rotating, rotating,





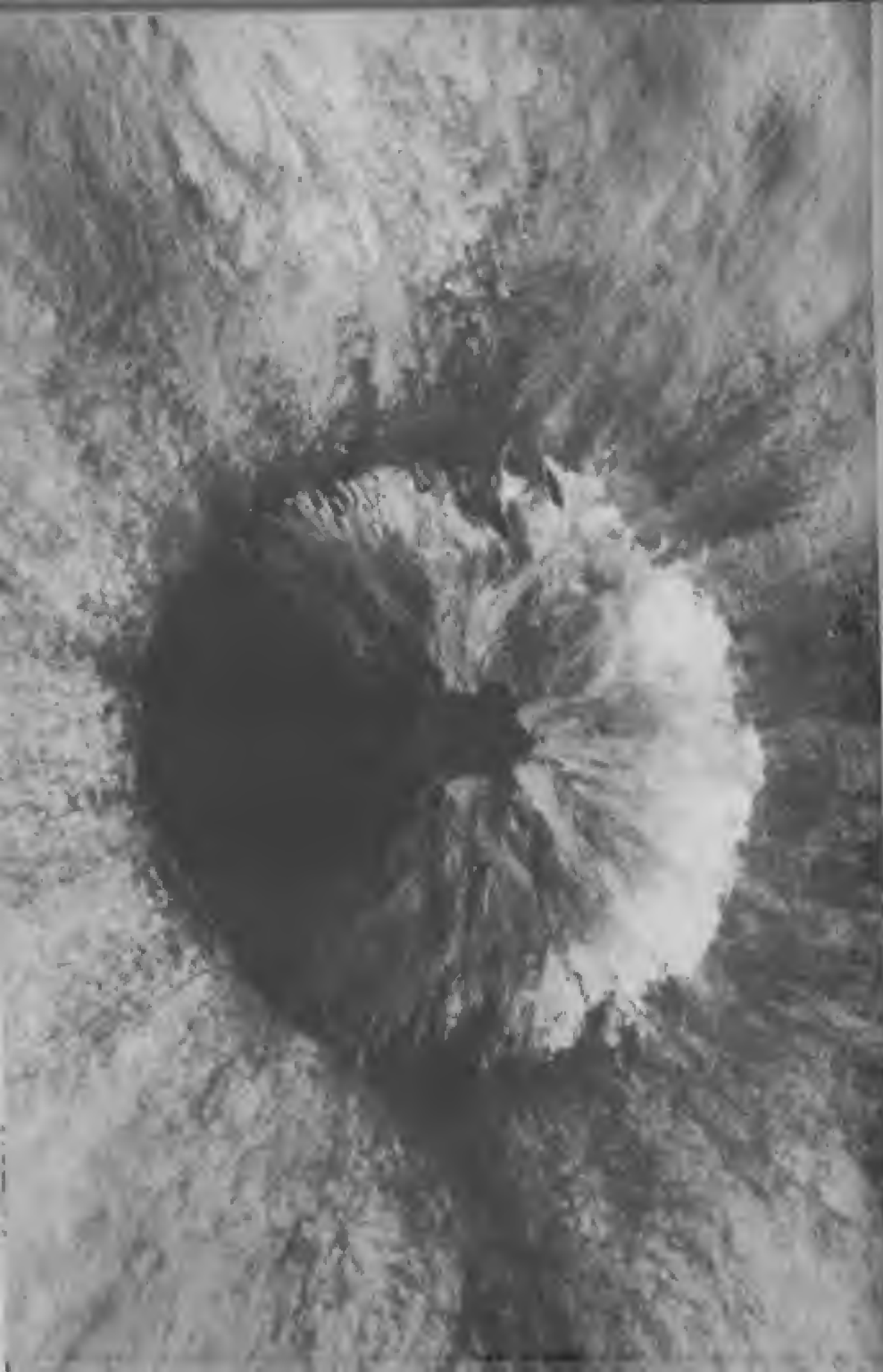


then sliding past, effortlessly, marvelously.  
What a marvel of mankind that I am here at all.  
How incredible of conception and execution . . .  
the technical wonder of an age that turns on poverty,  
needy mothers, Vietnam.  
Hopeless? Maybe man is inspired to reach out this way  
so he won't see his feet stuck in his own mud.

The light of earth still shines on me, so far away  
Will I really return? Will this cold mechanical box survive  
long enough?  
Complete darkness enfolds my body and so my soul;  
The next step is out there. Out there stars shine,  
pieces of light . . . a pattern of so much brilliance  
that I am honored even here.

Now the light is suspended between darknesses  
stretching from side to side like billowing waves,  
almost fluttering.  
I glide upward, above the waves of ocean moon. She is  
forever moving just out of reach and I sail on,  
never touching, only watching and wanting to know.

Now the light is blinding, huge, filling my mind  
and stopping all thought



Now I can see where I'm going and am impatient  
to get there—  
What will I see? The wounds of ageless strife, the anguish  
of cooling and petrifying, the punctures of an  
infinity of collisions?  
No signs of healing, or love, or care, or compassion?  
She is not healed. All the scars are there—from birth.  
Poor lady of the night.  
But we love her and she knows it full well, for she  
has been faithful all these years.  
And what of the scars on planet earth?  
Will she heal her wounds, love her friends,  
have compassion for the hurt and sick?  
Or will she end up like the lifeless old moon, revolving  
slowly, hanging naked in the sky?  
Life is too precious to let ego-centered ideas snuff it out.  
The moon must teach us . . . not only of age and geology,  
planets and solar puzzles  
But of life, else we end up like her,

## HELLO EARTH

Hello Earth:

I see you shining  
Through the glaze of space  
Floating in the oil-slick void  
A quilt around your face.

Hello Earth:

It's clear you're hiding  
Worldly problems from my view  
Could it be you are forgetting  
I am worldly too?

Hello Earth:

Please stop pretending  
You are sinless, new and pure  
The scars that you are hiding  
Only heighten your allure

Hello Earth:

I wish you'd answer  
And in answering take stock

ARABIC : mar-HAH-bah al el-ARDE , in-Endeavour ee-LAY-Kum sa-LAM

CHINESE : way ! DEE-tshu, Endeavour HIANG-nec-man WAN-how  
also : way ! DEE-tshu, Endeavour EE-how-mah

FRENCH : AL-lo tair, sah-LOO de le Endeavour

GERMAN : goo-ten-TAG ER-deh, GRU- aus Endeavour

GREEK : YAS-su ye, che-re-tis-MO APO-tinne Endeavour

HEBREW : sha-LOHM AH-ret-se, bra OT me-Endeavour

ITALIAN : chow TAY-rah, ow-GOO- DAY-lah Endeavour

RUSSIAN : ZDRA-tzuy-te ta-VA-rit ee, pree-ZET say-EndeavouRA

SPANISH : OH-lah tee-AY-rah, sah-LO del-Endeavour



It's clear you are a spaceship  
And must do with what you've got.

Hello Earth:

Your life is finite  
Does the answer lie out here?  
If we don't resolve your problems  
Life on Earth may be too dear.

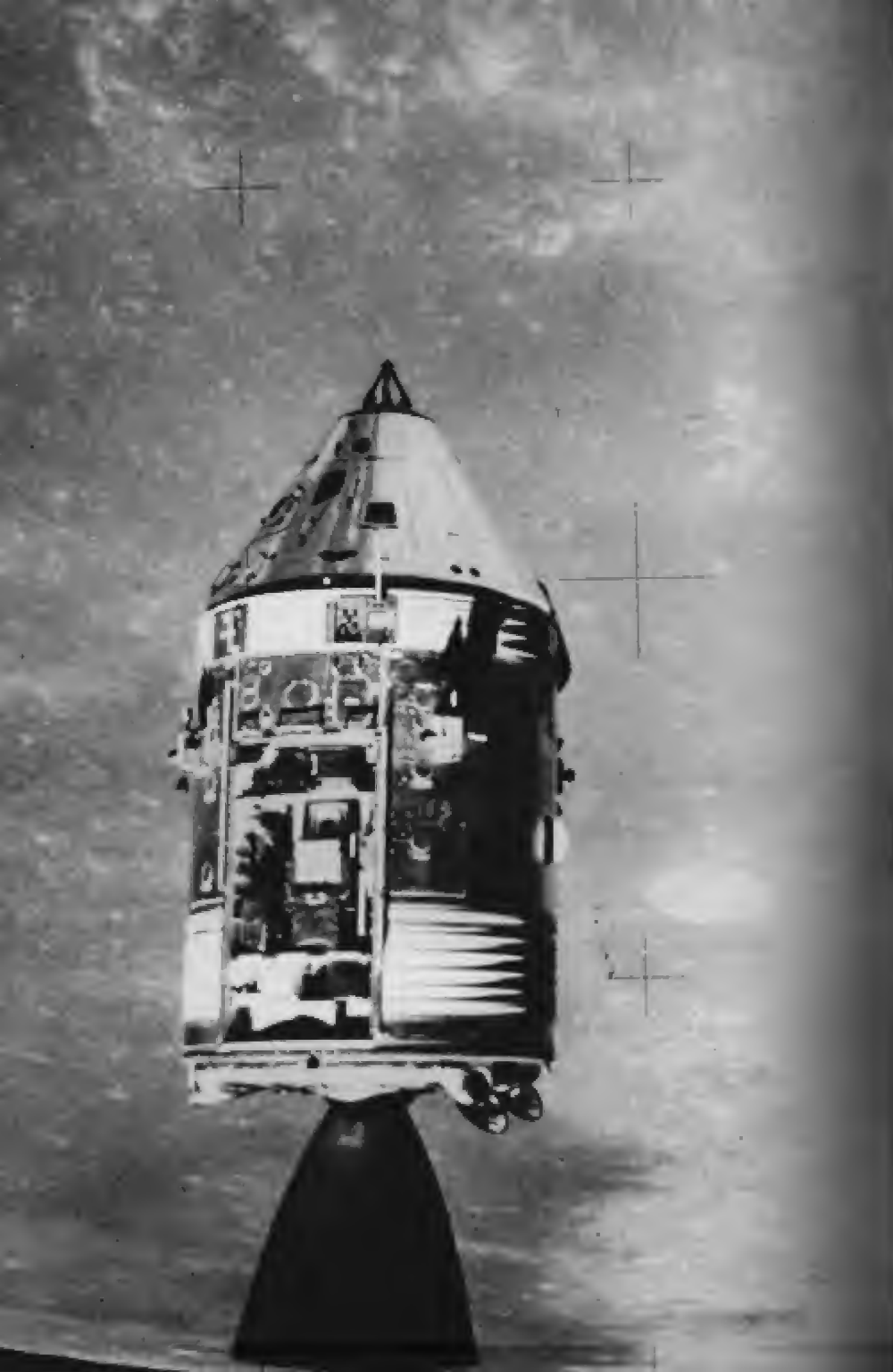
Hello Earth:

Greetings from Endeavour!!

## SPACEWALK

A spacewalk  
Is like  
Being let out  
At night  
For a swim  
By Moby Dick.





## FLOATING

I float outside to look around  
Slowly, soundlessly,  
And my security cord lengthens.

Poised in flight  
Cloudy frail earth sails on;

My world Endeavour  
Is bathed in light of a burning sun  
Trapped by lunar day on the other side—

Nowhere is my vantage point  
Between the earth and moon.

## DEE O'HARA

The scent of perfume  
In the odorous smell of the kitchen,  
The circle of dark oil  
That smoothes the storm tossed sea,  
The calm voice of hope  
In the din of chaotic humanity,  
The tender loving touch  
That soothes the uncertainty in all of us,  
The waiting, patient, listening ear  
In a Stonehenge kind of world  
Are what Dee O'Hara means to me.

*Dee O'Hara was for many years our flight nurse. She was assigned this duty during the Mercury program and continued as our treasured friend and nurse through the Skylab program. She now works at NASA Ames Research Center in California.*





## THE HERO

Distant, hazy jewel of night  
Floating unaware,  
Sending forth the seed of life  
By intelligence that cares  
And yet, I wonder;

We serve time-honored rites of adulation:  
A Roman feast before the fight,  
An Irish wake,  
A new namesake,  
The Hero stands  
    Before the crowd

If all goes well he thrills those crowds  
And stands in front again  
For accolades  
And motorcades  
Big parades





Front-page charades  
Resident hero, puppet hero  
Some hero!

Watch out!  
Don't stub your toe or stumble.  
You'll find the orgy is all;  
Not the cause  
Celebration or damnation  
Castigation  
Denunciation  
They don't care  
You're it, old friend, old buddy  
You're the Hero.

## CYCLE

Umbilicals

Breaking free  
Being born  
Eternity.

Growing up

Getting wise  
Being worldly  
No surprise.

Learn to fly

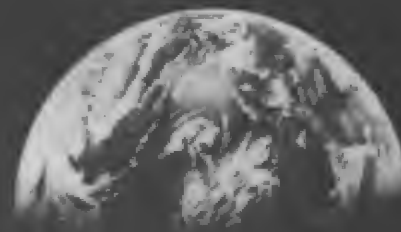
Getting wings  
Rise above  
Those earthly things.

Something special

Comes along  
Go to moon  
As in the song.

Umbilicals

EVA



Out the hatch  
In light of day.

Far away  
Mother Earth  
Floats along  
Watching birth.

Cycle over  
Doing fine  
I was born  
At thirty-nine.

## LAUNCH FROM THE BLEACHERS

They stand like newlyweds  
She in virginal white  
He with arms outstretched  
Silhouetted against the sky.  
They embrace.

Last night she was a brilliant ghost  
Caught by the lights in repose  
The tiny van draws up  
And deposits her eyes and mind.  
Now she is eager to be gone.

All around the throngs keep vigil  
She quivers as the  
Ceremonial hour nears,  
Impatient, she fumes  
With frustration.

She's leashed and restrained  
Great sheets of ice fall





Still she is held.  
The crowds hush and pause;  
T-1 hour and counting.

She hears, responds,  
And slowly comes to life  
Still held by loving arms.  
She's almost

Ready

Her attendants draw away—white room and van—  
The waiting crowds watch intently  
As Swing Arm seven pulls away,  
No retreat now.

T-3

Her mind works feverishly  
Insuring all is right  
Everything is right  
The word spreads quickly

T-2

Why am I watching here  
Like some poor tourist?  
I know what they are doing

And I long to be with them.  
T-1

The fire's in her now  
Her moment is here;  
Unhesitatingly she moves  
Passion released  
In motion.

The tower slides beneath her  
As she climbs on fire and noise  
From below we watch her magic  
And marvel at her poise.  
She flies.





## APOLLO LOST

Say to me, no more Apollo,  
Say to me the job is done—  
Then I say your words are hollow  
The work has just begun.

Say to me, we are unknown,  
Say to me nobody cares—  
Then I will show you moonstone  
Locked up for our heirs.

Say to me, we need the money  
Just to feed the poor, and more—  
And I'll say to you that's funny  
It's for them that we explore.

Say to me, we should be fighting,  
Say to me the world's at war—





Then I say we are uniting  
People tired of war, and more.

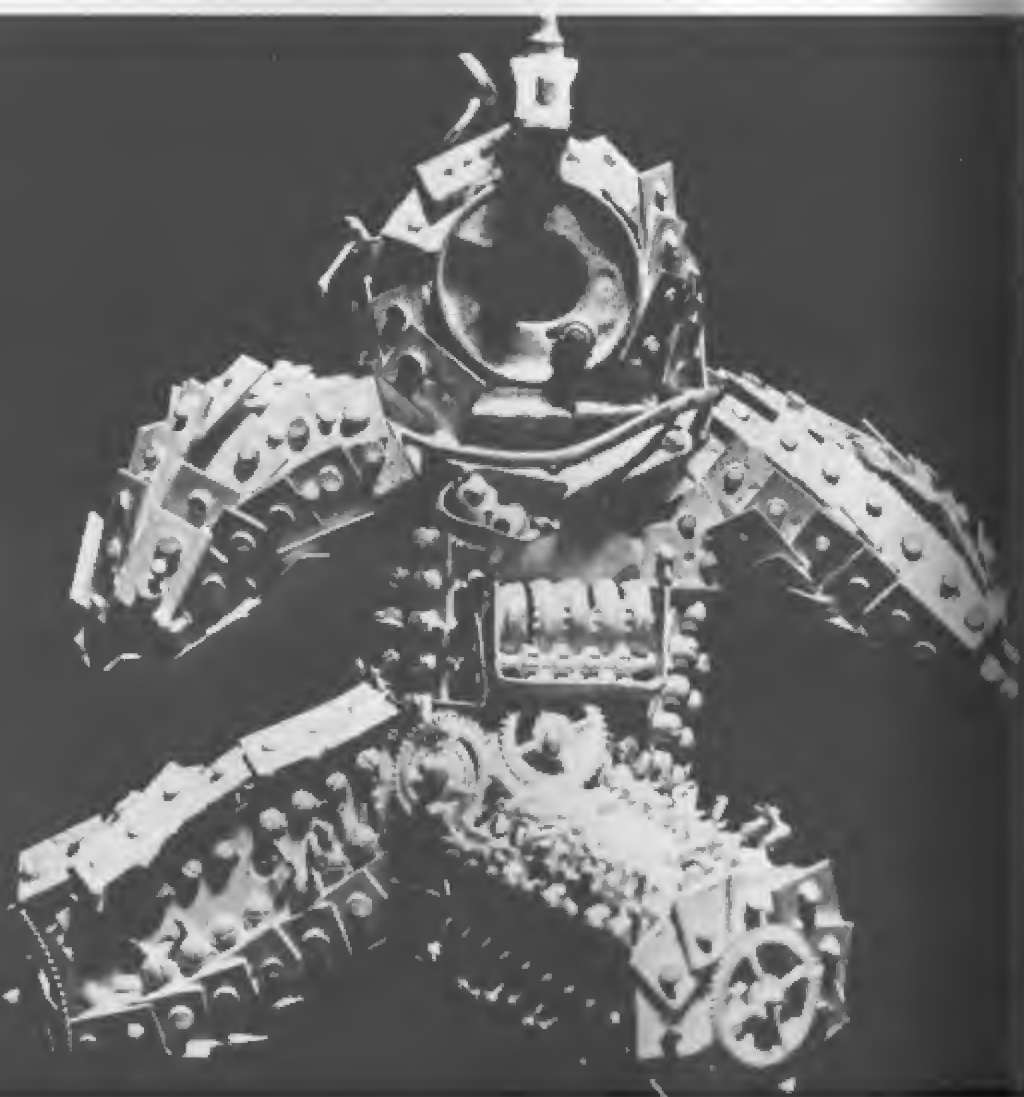
Say to me, there's too much danger,  
Say to me we could be lost—  
Then I say I am no stranger  
To the danger, that's the cost.

Say to me, the world is dying,  
Ready for the last hurrah—  
I cry—you fool, keep trying  
We must find our Shangri-La.

## WHAT ARE HEROES?

What are heroes?  
Bits of steel  
And bronze and silver you can feel  
With steady eye and chiseled chin  
Iron muscle, leather skin.  
Their marvels are for all to see,  
They step where others dare not be  
To save us all from anarchy  
Or monarchy—or democracy . . .  
Do not question their master plan  
Or try to psych the metal man  
Because he has a hollow brain  
And tarnishes quickly in the rain.

What are explorers?  
Men who are bold  
Who strive and struggle in the cold



To find the place not yet discovered,  
Return the treasures not yet recovered;  
To place their name upon a feature  
Or assign it to some new-found creature.  
The world is always far away  
In the mind of this marvelous man of clay  
Because he's not involved, you see,  
In the problems of humanity . . .  
And so he shuns society  
While craving notoriety.

What are pilots?  
Men of wings  
Who soar in space and do the things  
That earthbound mortals would not try  
Because they think God's in the sky.  
So pilots do their daring feats  
In the air, and under the sheets,  
As their reward for taking flight

Keeps them awake most every night.  
These men of fearless flying skill  
Have no conscience, but the thrill  
Of conquest burns them deep  
Regardless of those at home who weep.

What are astronauts?  
And what am I?  
Hero, pilot, explorer, in love  
With myself and with my work,  
Unheeding the many dangers that lurk  
In outer space or here on earth  
I accept all as due my birth;  
Magnificent performance, on lunar surface  
Belies my need of an earthly purpose,  
Accepting gifts as my just reward  
Taking grey money to be on the board.  
I do my job way out in space  
But, God forgive, the friends erased.

## ABOUT THE AUTHOR

Alfred M. Worden, NASA astronaut and command-module pilot for the Apollo 15 mission in 1971, is at present a senior aerospace scientist with the NASA-Ames Research Center in California.

Worden was one of nineteen astronauts selected in 1966. He was a member of the support crew for Apollo 9 and was backup command-module pilot for the Apollo 12 mission. With him on the Apollo 15 mission—July 26 to August 7, 1971—were David R. Scott, spacecraft commander, and James B. Irwin, lunar-module pilot. Apollo 15 was the fourth manned lunar landing mission—the first truly scientific one—and the first to visit and explore the moon's Hadley Rille and Apennine Mountains, which are located on the southeast edge of the Mare Imbrium (Sea of Rains).

Before assignment as an astronaut, Worden graduated from, and was later an instructor at, the Aerospace Research Pilot School, Edwards Air Force Base in California. He is also a graduate of the Empire Test Pilot's School, Farnborough, England. He was a pilot and armament officer with the 95th Fighter Interceptor Squadron, Andrews Air Force Base, Virginia, and attended the Instruments Pilots Instructor School at Randolph Air Force Base, Texas. He has logged more than 3,750 hours of flying time, including more than 3,000 hours in jet aircraft. During Apollo 15, Worden logged 295 hours in space, nearly 67 of which

were spent in complete solitude while Scott and Irwin were on the moon's surface.

Today, at the NASA-Ames Research Center, Worden works with programs in airborne science and space-shuttle simulation studies which utilize his spaceflight and test-pilot experience to develop systems and procedures from an astronaut's point of view. He also participates in emerging science programs, such as earth-resources surveys and high-altitude observations using specially equipped aircraft.